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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,277	02/20/2004	Hung-En Tai	LKSP0045USA	2276

27765 7590 02/08/2006

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MERRIFIELD, VA 22116

EXAMINER
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GARLAND, STEVEN R

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/708,277	<b>Applicant(s)</b> TAI ET AL.	
	<b>Examiner</b> Steven R. Garland	<b>Art Unit</b> 2125	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-21 are pending.
2. The disclosure is objected to because of the following informalities: in numbered paragraph 0029 , line 13, " ananalysis" should be changed to -- an analysis--. In claim 17, line 3, "playing" should be changed to --displaying--.

Appropriate correction is required.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2-6,8,9,11, 12,13,17,and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Examples are given below.

In claim 2, the last two lines, the phrase " each chip is performed according to their positions of the wafer" is unclear as to how many positions a chip has.

In claim 3, it is uncertain as to what "displaying the inspecting results is performed according to kinds, lots, and manufacturing dates of each wafer" actually means, since it appears that a wafer would be single kind, be in a single lot, etc.

Claim 4, lines 1-2, "the inspecting results and statistics of the semiconductor products" lacks a clear antecedent basis. It is also uncertain as to what the predetermined period refers to i.e. display time or the time the inspecting results were produced.

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In claim 5, lines 6-7, "the kind and date of the processes" lacks a clear antecedent basis.

Claim 6, line 5, "the trend charts" lacks a proper antecedent basis.

Claim 8, line 2, "the analysis results in the different periods" lacks a proper antecedent basis.

Claim 20, lines 6-8, it is unclear if one mode or multiple modes is selected for the mode.

The other claims have problems similar to the various examples given above.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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7. Claims 1,3-8,10-16,18,19,and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over La et al. 5,761,064.

La et al. 5,761,064 teaches a semiconductor wafer defect management system in which wafers are inspected and the inspection results are stored in a database. (abstract) La teaches making the data available throughout corporate community is desirable. (Col. 1, lines 59-62) La further teaches identifying a wafer, identifying a device used to make a wafer, identifying a wafer lot, display of trends/charts (col. 2, lines 31-65); collecting data, converting the data if required, and use of a database ( col. 3, lines 23-62). La also discloses data analysis, selecting information, and grouping data such as by lot ( col. 3, lines 23-62). La teaches acquiring information in real time ( col. 5, lines 65-68); that the data is organized and tagged and can be called up in various forms ( col. 6, lines 1-37) depending on the user requirements. La further teaches the use of box plots, use of statistics; selecting wafer data ( such as defect level ) based on grouping ( such as lots, wafer, device, equipment, etc. ) comparing the data for different lots or workweeks and displaying the results of the analysis ( note col. 6, lines 47-67) as well as saving the analysis for later review (col. 3, lines 41-50) and the use of various trend charts (col. 6, line 47 to col. 7, line 60). See the abstract; figures; col. 1, lines 33-62; col. 2, lines 18-65; col. 3, lines 23-62; col. 4, lines 40-59; col. 5, line 31 to col. 6, line 67; col. 7, lines 13-55; and the claims.

La however does not expressly state that the lot information is stored in the database.

It would have been obvious to one of ordinary skill in the art to modify La to store the lot information in the database along with the wafer data so that it can accessed and used by the relational database.

8. Claims 2,9,17, and 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

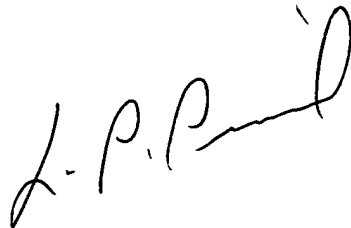
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tai et al. 6,828,776 is of interest in grouping. Miller et al. 6,720,194 is of interest in the use of graphs, charts, ANOVA, etc. Hu et al. 6,314,379 is of interest in defect management.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R. Garland whose telephone number is 571-272-3741. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



*SRG*

Steven R Garland  
Examiner  
Art Unit 2125

1/31/06

**LEO PICARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100**